Sequence Listing

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Cochran, Andrea G.
     Skelton, Nicholas J.
     Starovasnik, Melissa A.
<120> Structured Peptide Scaffold For Displaying Turn
     Libraries On Phage
<130> 11669.116USU1
<140> US 09/592,695
<141> 2000-06-13
<150> US 60/139,017
<151> 1999-06-14
<160> 49
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<211> 18
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<220>
<223> turn peptide
<220>
<221> UNSURE
<222> 2, 16
<223> Xaa is Trp, Tyr, Phe, His, Ile, Val or Thr.
<220>
<221> UNSURE
<222> 3, 17
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile or Val.
<220>
<221> UNSURE
<222> 4-15
<223> Xaa is a naturally occurring L-amino acid and 9 may be absent.
<400> 1
<210> 2
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Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys
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<213> Artificial Sequence
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Ser Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys Lys
<210> 4
<211> 10
<212> PRT
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Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys
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<400> 5
Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys
<210> 6
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Ser Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys Lys
<210> 7
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<213> Artificial Sequence
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<400> 8
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<210> 9
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 Ser Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys Lys
<210> 10
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<212> PRT
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Met Cys Gly Asn Gln Gly Met Phe Leu Thr Cys Lys
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<211> 12
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<400> 11
Met Cys Thr Trp Gln Gly Met Phe Leu Thr Cys Lys
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<210> 12
<211> 10
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<223> turn peptide
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 Cys Thr Lys Val Trp Gln Leu Trp Thr Cys
                  5
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Ser Cys Thr Trp Val Trp Gln Leu Leu Thr Cys Lys
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<223> turn peptide
<400> 14
Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys
<210> 15
<211> 12
<212> PRT
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<223> turn peptide
<400> 15
 Ser Cys Thr Trp Gly Pro Leu Thr Leu Thr Cys Lys
<210> 16
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<220>
<223> turn peptide
<220>
<221> UNSURE
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<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.
<400> 16
Cys Thr Xaa Glu Gly Asn Lys Leu Thr Cys
<210> 17
<211> 10
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<223> turn peptide
<220>
<221> UNSURE
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.
<400> 17
Cys Thr Xaa Glu Asn Gly Lys Leu Thr Cys
<210> 18
<211> 10
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
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<221> UNSURE
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.
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<221> UNSURE
<222> 5
<223> Pro is D-Pro.
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<210> 19
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<212> PRT
<213> Artificial Sequence
<223> turn peptide
<220>
<221> UNSURE
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<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.
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<221> UNSURE
<222> 5
<223> Pro is D-Pro.
<400> 19
Cys Thr Xaa Glu Pro Gly Lys Leu Thr Cys
                  5
<210> 20
<211> 10
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
<220>
<221> UNSURE
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<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.
<400> 20
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<210> 21
<211> 10
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
<220>
<221> UNSURE
<222> 8
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.
<400> 21
Cys Thr Leu Glu Gly Asn Lys Xaa Thr Cys
<210> 22
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<223> turn peptide
<220>
<221> UNSURE
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<222> 3
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.
<400> 22
Cys Thr Xaa Glu Gly Asn Lys Trp Thr Cys
<210> 23
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<212> PRT
<213> Artificial Sequence
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<223> turn peptide
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<221> UNSURE
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.
<400> 23
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<210> 24
<211> 102
<212> DNA
<213> Artificial Sequence
<220>
<223> synthesized sequence
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taataataaa tggctgatcc gaaccgtttc cgcggtaaag atctgggtgg 50
cggtactcca aacgacccgc caaccactcc accaactgat agcccaggcg 100
gt 102
<210> 25
<211> 72
<212> DNA
<213> Artificial Sequence
<220>
<223> Synthesized sequence.
<220>
<221> unsure
<222> 19-20, 31-32, 34-35, 37-38, 40-41, 52-53
<223> unknown base
<400> 25
tecgeetegg ettatgeann stgeaettgg nnsnnsnnsn nsetgaettg 50
 tnnsatggct gatccgaacc gt 72
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<210> 26
<211> 9
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
<400> 26
Tyr Gln Asn Pro Asp Gly Ser Gln Ala
<210> 27
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 27
Ile Tyr Ser Asn Pro Asp Gly Thr Trp Thr
                  5
<210> 28
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 28
Ile Tyr Ser Asn Ser Asp Gly Thr Trp Thr
<210> 29
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
Ile Thr Ser Asn Ser Asp Gly Thr Trp Thr
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<210> 30
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
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<400> 30
Tyr Ile Thr Asn Ser Asp Gly Thr Trp Thr
<210> 31
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 31
Arg Gly Ile Thr Val Asn Gly Lys Thr Tyr Gly Arg
<210> 32
<211> 12
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
<220>
<221> UNSURE
<222> 6
<223> Xaa is D-Pro or L-Asn.
<220>
<221> UNSURE
<222> 8
<223> Xaa is Orn.
<400> 32
Arg Tyr Val Glu Val Xaa Gly Xaa Lys Ile Leu Gln
<210> 33
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 33
Lys Lys Tyr Thr Val Ser Ile Asn Gly Lys Lys Ile Thr Val Ser
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Ile
<210> 34
<211> 16
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<212> PRT
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<223> turn peptide
 <400> 34
 Gly Glu Trp Thr Tyr Asp Asp Ala Thr Lys Thr Phe Thr Val Thr
                    5
 Glu
<210> 35
. <211> 8
<212> PRT
<213> Artificial Sequence
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<223> turn peptide
<400> 35
 Ala Cys Ser Pro Gly His Cys Glu
<210> 36
<211> 11
 <212> PRT
<213> Artificial Sequence
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<223> turn peptide
<400> 36
 Cys Gly Val Ser Arg Gln Gly Lys Pro Tyr Cys
 <210> 37
 <211> 16
 <212> PRT
 <213> Artificial Sequence
<220>
<223> turn peptide
 Gly Cys Lys Pro Thr Phe Arg Arg Leu Lys Trp Lys Tyr Lys Cys
                    5
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 Gly
 <210> 38
 <211> 18
 <212> PRT
 <213> Artificial Sequence
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<220>
<223> turn peptide
<400> 38
 Cys Ala Gly Phe Met Arg Ile Arg Gly Arg Ile His Pro Leu Cys
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Met Arg Arg
<210> 39
<211> 10
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<213> Artificial Sequence
<220>
<223> turn peptide
<400> 39
Phe Cys Asn Gln Gly Ser Phe Leu Cys Tyr
<210> 40
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 40
Phe Cys Tyr Ile Cys Glu Val Glu Asp Gln Cys Tyr
<210> 41
<211> 16
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<220>
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Met Gln Ile Gly Val Lys Asn Pro Asp Gly Thr Ile Thr Leu Glu Val
                  5
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<210> 42
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<213> Artificial Sequence
<223> turn peptide
<220>
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<221> UNSURE
<222> 7
<223> Xaa is Pro.
<220>
<221> UNSURE
<222> 8
<223> Xaa is Ala or Gly.
<400> 42
Met Gln Ile Gly Val Lys Xaa Xaa Lys Thr Ile Thr Leu Glu Val
                                       10
<210> 43
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<220>
<221> UNSURE
<222> 2, 5
<223> Xaa is any amino acid.
<400> 43
Cys Xaa Pro Gly Xaa Cys
<210> 44
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 44
Glu Gly Asn Lys
<210> 45
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 45
Glu Asn Gly Lys
<210> 46
<211> 4
<212> PRT
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<213> Artificial Sequence

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<220>
<223> turn peptide
<400> 46
Gln Gly Ser Phe
<210> 47
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 47
Val Trp Gln Leu
<210> 48
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<400> 48
Gly Pro Leu Thr
<210> 49
<211> 118
<212> PRT
<213> Artificial Sequence
<220>
<223> turn peptide
<220>
<221> UNSURE
<222> 1-50
<223> Xaa is any naturally occurring amino acid, and all but one may be
missing.
<220>
<221> UNSURE
<223> Xaa is Trp, Tyr, Phe, His, Ile, Val, or Thr.
<220>
<221> UNSURE
<222> 54-65
<223> Xaa is a naturally occurring L-amino acid and all but 3 may be missing.
<220>
<221> UNSURE
<222> 67
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<223> Xaa is Trp, Tyr, Phe, His, Ile, Val, or Thr.

<220>

<221> UNSURE

<222> 69-118

<223> Xaa is a naturally occurring amino acid and all but one may be missing.

<400> 49

Xaa Xaa Xaa Xaa 115